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ABSTRACT

The Americans with Disabilities Act (ADA) 1990 includes a provision requiring that new construction and alterations to existing facilities comply with the ADA Standards for Accessible Design. This report explains 23 common accessibility errors or omissions that the Department of Justice has identified during the course of its enforcement efforts. Each error/omission addresses the specific point of failure, the probable result of the error, and the ADA requirement that has been violated. Also, the text includes references to figures found in the Standards for Accessible Design. Topics cover concerns such as parking specifications, stairs and doors, bathroom accessibility, drinking fountains, and lodging accommodations. (CMD)

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Common ADA Errors and Omissions in New Construction and Alterations

**U.S. Department of Justice
Civil Rights Division
Disability Rights Section**

June 1997



Common ADA Errors and Omissions in New Construction and Alterations

Introduction

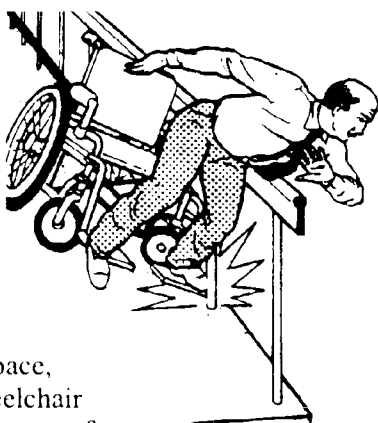
The ADA requires that new construction and alterations to existing facilities comply with the ADA Standards for Accessible Design¹ (Standards). ADA requirements for new construction and alterations include detailed provisions for elements, spaces, and facilities. Successful accessibility is often measured in inches, so attention to detail can make the difference between achieving access and excluding or injuring someone. When the ADA's minimum requirements are not met, the results can limit or exclude a person with a disability and can be dangerous. For example, when a curb ramp extends into an access aisle at an accessible parking space, a person using a wheelchair may not be able to get out of the car or van. When the slope of a sidewalk that is an accessible route becomes steeper than 1 to 20, railings and edge protection are

required for safe use. Objects that project into circulation spaces from the side or that do not provide at least 80 inches of head clearance can be extremely hazardous to people who are blind or who have low vision.

This document lists a sampling of common accessibility errors or omissions that have been identified through the Department of Justice's ongoing enforcement efforts. The specific requirement

of the Standards that has not been met follows each error/omission. All references to figures can be found in the Standards. The list of errors/omissions provides examples of common deficiencies. It is not intended to be comprehensive or exhaustive. Any

failure to comply with the Standards violates the ADA.



For additional information about the design and construction requirements of the Americans with Disabilities Act (ADA), contact the Department of Justice ADA Information Line. This free service provides answers to general and technical questions about ADA requirements and is a source for free ADA materials including the ADA Standards for Accessible Design. You may reach the ADA Information Line at:

800 - 514 - 0301 (voice) or
800 - 514 - 0383 (TTY).

ADA information is also available on the Department's ADA Home Page on the World Wide Web at (<http://www.usdoj.gov/crt/ada/adahom1.htm>).

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¹ State and local governments currently have the option to choose the Standards or the Uniform Federal Accessibility Standard (UFAS).

Parking

Error/Omission:

The built-up curb ramp projects into the access aisle.

The accessible parking space and access aisle is not level in all directions.

Result:

When an access aisle has a sloped surface, a wheelchair may roll away from a car or van preventing the wheelchair user from getting out of the vehicle. The sloped surface also prevents a van-mounted wheelchair lift from being fully-lowered to the access aisle surface.

Requirement:

4.6.3* Parking Spaces. ...Parking spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions.

Error/Omission:

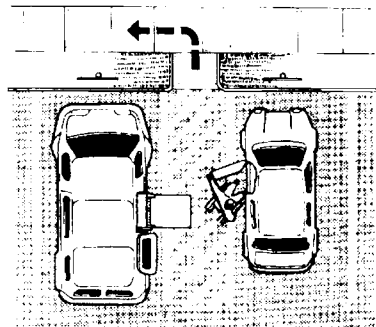
There is no accessible route from accessible parking to an accessible entrance.

Result:

A person using a wheelchair, scooter, or walker has no way of getting from the accessible parking space to the building entrance. Often when there is an inaccessible walkway provided for others, wheelchair users must use a roadway or vehicular route which can be dangerous.

Requirement:

4.6.3* Parking Spaces. ...Parking access aisles shall be part of an accessible route to the building or facility entrance and shall comply with 4.3.



Error/Omission:

No van accessible spaces are provided in the parking area.

Result:

A person who uses a van equipped with a wheelchair lift has inadequate space to lower the wheelchair lift and get out of the vehicle.

Requirement:

4.1.2 (5)(b) One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 in (2440 mm) wide.

* Asterisk denotes that related, non-mandatory material is in the Appendix to the Standards.

Van-accessible (continued)

Requirement:

minimum and shall be designated "van accessible" as required by 4.6.4. The vertical clearance at such spaces shall comply with 4.6.5. All such spaces may be grouped on one level of a parking structure.

Accessible Route - Exterior

Error/Omission:

The pedestrian routes on a site from public transportation stops, accessible parking spaces, passenger loading zones, and public streets and sidewalks to the accessible entrance(s) are not accessible.

Result:

People with disabilities cannot travel from the site entry points to the accessible entrance(s). In some cases, people must use vehicular routes which can be dangerous.

Requirement:

4.1.2 (1) At least one accessible route complying with 4.3 shall be provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones if provided, and public streets or sidewalks, to an accessible building entrance.

Curb Ramps

Error/Omission:

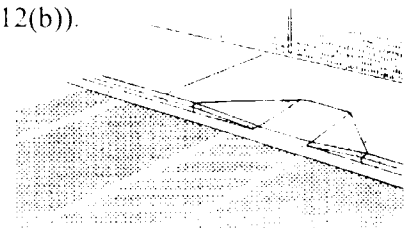
Curb ramp that is located across a circulation path has steep unprotected side flares.

Result:

People walking across the curb ramp may trip and be injured. People who use wheelchairs can tip over if they accidentally roll over the non-flared sides.

Requirement:

4.7.5 Sides of Curb Ramps. If a curb ramp is located where pedestrians must walk across the ramp, or where it is not protected by handrails or guardrails, it shall have flared sides; the maximum slope of the flare shall be 1:10 (see Fig. 12(a)). Curb ramps with returned curbs may be used where pedestrians would not normally walk across the ramp (see Fig. 12(b)).



Ramps

Error/Omission:

Landing areas where ramps change direction (e.g., switchbacks or 90° turns) are too small.

Result:

Wheelchair users are unable to go up or down the ramp because there is not enough space to turn on a level surface. This makes the ramp unusable.

Requirement:

4.8.4* (3) If ramps change direction at landings, the minimum landing size shall be 60 in by 60 in (1525 mm by 1525 mm).

Error/Omission:

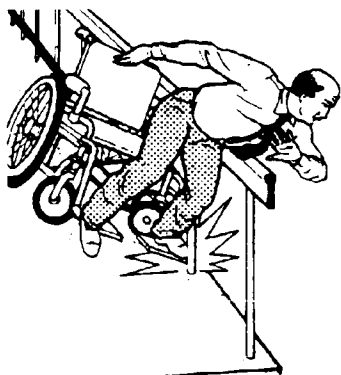
Parts of an accessible route with slopes that exceed 1:20 lack required features including handrails and edge protection.

Result:

When a walkway or other pedestrian surface has a slope greater than 1:20, it is more difficult to maintain control of a wheelchair. Wheelchair users may also not be able to climb up the sloped route without railings. Lack of edge protection may result in injury if a wheelchair user rolls off the side of the route. People who use a mobility device such as crutches, a cane, or a walker may lose their balance or fall while using a sloped section that does not have handrails or edge protection.

Requirement:

4.8.1* General. Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with 4.8.



Stairs

Error/Omission:

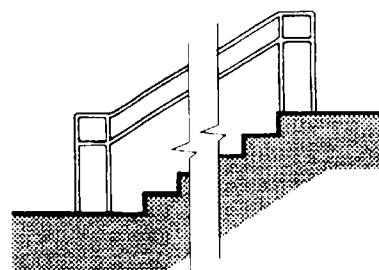
Handrail extensions are not provided at the top and bottom risers.

Result:

People who use crutches or a cane or who have limited balance may fall at the top or bottom of the stairs because they have no railing to hold onto as they make the transition from the steps to the landing.

Requirement:

4.9.4(2) If handrails are not continuous, they shall extend at least 12 in (305 mm) beyond the top riser and at least 12 in (305



Stairs (continued)

Figure 19(c) and (d) show handrail extensions.

Requirement:

mm) plus the width of one tread beyond the bottom riser. At the top, the extension shall be parallel with the floor or ground surface. At the bottom, the handrail shall continue to slope for a distance of the width of one tread from the bottom riser; the remainder of the extension shall be horizontal (see Fig. 19(c) and (d)). Handrail extensions shall comply with 4.4.

Doors

Error/Omission:

Adequate maneuvering clearance is not provided at doors, including doors to accessible toilet stalls.

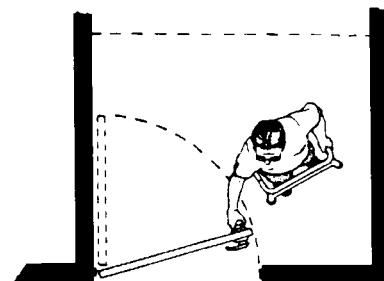
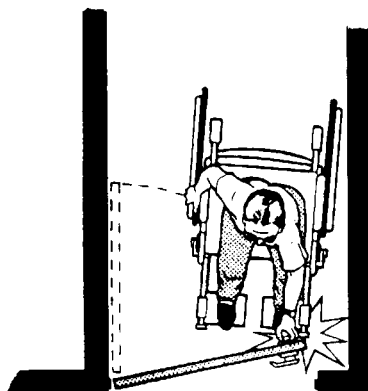
Result:

A person using a wheelchair cannot open the door without a clear level area in front of and adjacent to the door that provides a place to maneuver.

Requirement:

4.13.6 Maneuvering Clearances at Doors. Minimum maneuvering clearances at doors that are not automatic or power-assisted shall be as shown in Fig. 25. The floor or ground area within the required clearances shall be level and clear.

4.17.5* Doors. Toilet stall doors, including door hardware, shall comply with 4.13. If toilet stall approach is from the latch side of the stall door, clearance between the door side of the stall and any obstruction may be reduced to a minimum of 42 in (1065 mm) (Fig. 30).



Error/Omission:

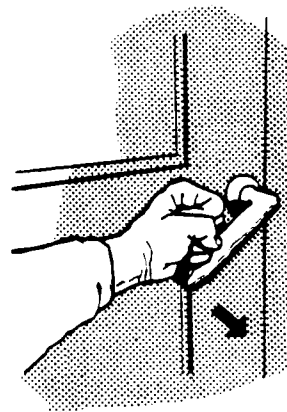
The shape of the door hardware requires tight grasping, pinching, and twisting of the wrist to use.

Result:

The door cannot be opened if the user cannot operate the latch or handle.

Requirement:

4.13.9* Door Hardware. Handles, pulls, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the



wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides. Hardware required for accessible door passage shall be mounted no higher than 48 in (1220 mm) above finished floor.

Circulation Paths



Error/Omission:

Objects protrude into circulation paths from the side or from posts.

Objects that overhang circulation paths do not provide clear headroom.

Circulation Paths (continued)

4.1.1 (3) All objects that protrude

Result:

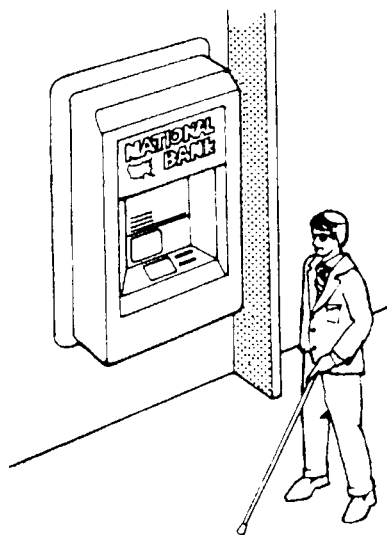
People who are blind or who have low vision can be seriously injured when they cannot detect an object by using the sweep of their cane.

Requirement:

4.1.2 (3) All objects that protrude from surfaces or posts into circulation paths shall comply with 4.4.

4.1.3 (2) All objects that overhang or protrude into circulation paths shall comply with 4.4.

4.4.1* General. Objects projecting from walls (for example, telephones) with their leading edges between 27 in and 80 in (685mm and 2030 mm) above the finished floor shall protrude no more than 4 in (100 mm) into walks, halls, corridors, passageways, or aisles (see Fig. 8(a)). Objects mounted with their leading edges at or below 27 in (685 mm) above the finished floor may protrude any amount (see Fig. 8(a) and (b)). Free-standing objects mounted on posts or pylons may overhang 12 in (305 mm) maximum from 27 in to 80 in (685 mm to 2030 mm) above the ground or finished floor (see Fig. 8(c) and (d)). Protruding objects shall not reduce the clear width of an accessible route or maneuvering space (see Fig. 8(e)).



4.4.2 Head Room. Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80 in (2030 mm) minimum clear head room (see Fig. 8(a)). If vertical clearance of an area adjoining an accessible route is reduced to less than 80 in (nominal dimension), a barrier to warn blind or visually-impaired persons shall be provided (see Fig. 8(c-1)).

Toilet Rooms and Bathrooms

Error/Omission:

Where toilet rooms or bathrooms are provided, not all public and common use toilet rooms and bathrooms (including locker rooms and toilet rooms for employee use) are accessible.

Toilet Rooms and Bathrooms (cont'd)

Result:

People with disabilities are restricted to a limited number of toilet rooms and may have to travel long distances to the accessible toilet room while others can use any toilet room.

Requirement:

4.1.3(11) Toilet Facilities: If toilet rooms are provided, then each public and common use toilet room shall comply with 4.22. Other toilet rooms provided for the use of occupants of specific spaces (i.e., a private toilet room for the occupant of a private office) shall be adaptable. If bathing rooms are provided, then each public and common use bathroom shall comply with 4.23. Accessible toilet rooms and bathing facilities shall be on an accessible route.

Error/Omission:

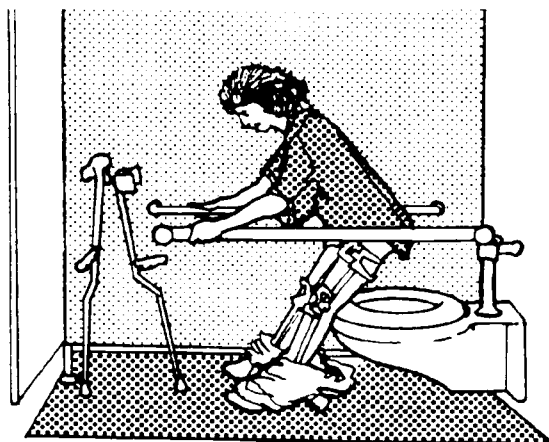
Toilet rooms with 6 or more toilet stalls lack a 36" wide "ambulatory" toilet stall.

Result:

Too few accessible stalls are provided for people with mobility disabilities. People who walk with crutches, a cane, a walker, or who have limited balance generally find it easier and safer to use a stall that has parallel grab bars.

Requirement:

4.22.4, 4.23.4 Water Closets. If toilet stalls are provided, then at least one shall be a standard toilet stall complying with 4.17; where 6 or more stalls are provided, in addition to the stall complying with 4.17.3, at least one stall 36 in (915 mm) wide with an outward swinging, self-closing door and parallel grab bars complying with Fig. 30(d) and 4.26 shall be provided. Water closets in such stalls shall comply with 4.16. If water closets are not in stalls, then at least one shall comply with 4.16.



Error/Omission:

The door to the toilet room swings into the required clear floor space at accessible fixtures, controls, and dispensers.

Result:

The entry door to the toilet room cannot be fully opened when a wheelchair user is using the accessible fixture, control, or dispenser. For example, if a person using a wheelchair is positioned in the clear floor space at the paper towel dispenser and that clear floor space overlaps the space needed to swing the door open, the door cannot be fully opened.

Requirement:

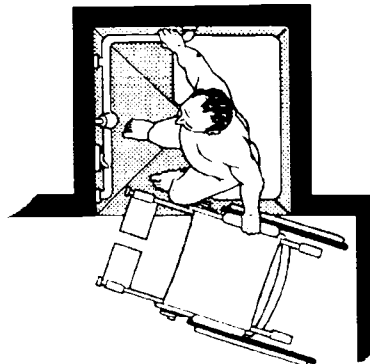
4.22.3*, 4.23.3* Clear Floor Space. The accessible fixtures and controls required in 4.22.4, 4.22.5, 4.22.6, 4.22.7 and 4.23.4, 4.23.5, 4.23.6, and 4.23.7 shall be on an accessible route. An unobstructed turning space complying with 4.2.3 shall be provided within an accessible toilet room. The clear floor space at fixtures and controls, the accessible route, and the turning space may overlap.

Error/Omission:

When a transfer shower is used, it is often larger than the required 36" x 36" size.

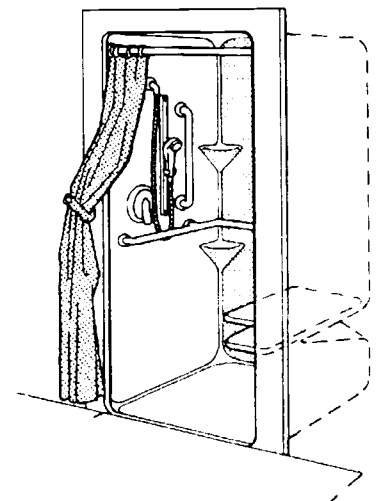
Result:

People with disabilities may be injured when using a transfer shower that is too large. Users may slide off the seat and fall onto the floor of the shower while reaching for the shower controls and hand-held showerhead.



Requirement:

4.21.2 Size and Clearances. Except as specified in 9.1.2, shower stall size and clear floor space shall comply with Fig. 35(a) or (b). The shower stall in Fig. 35(a) shall be 36 in by 36 in (915 mm by 915 mm). Shower stalls required by 9.1.2 shall comply with Fig. 57(a) or (b). The shower stall in Fig. 35(b) will fit into the space required for a bathtub.



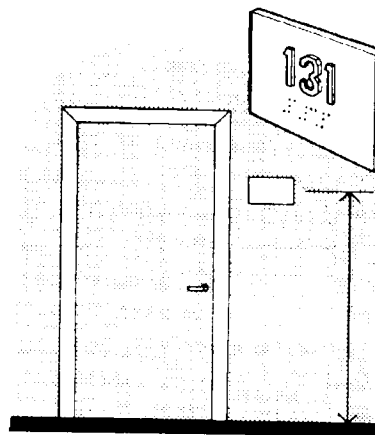
Signage

Error/Omission:

Where permanent room identification signage is provided, it is mounted in the wrong location.

Result:

People who are blind or visually impaired are trained to look in a consistent location for tactile signs. They cannot find the sign if it is not mounted in the correct location.



Requirement:

4.1.3(16)(a) Signs which designate permanent rooms and spaces shall comply with 4.30.1, 4.30.4, 4.30.5 and 4.30.6.

4.30.6 Mounting Location and Height. Where permanent identification is provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side of the door. Where there is no wall space to the latch side of the door, including at double leaf doors, signs shall be placed on the nearest adjacent wall. Mounting height shall be 60 in (1525 mm) above the finish floor to the centerline of the sign. Mounting location for such signage shall be so that a person may approach within 3 in (76 mm) of signage without encountering protruding objects or standing within the swing of a door.

Visual Alarms

Error/Omission:

No visual alarms are provided although an audible alarm system is installed.

Result:

People who are deaf have no way of knowing that a building emergency has been declared while others who can hear are alerted by the audible alarm. This is especially true of toilet rooms, and study carrel areas where occupants cannot observe others leaving the facility.

Requirement:

4.1.3(14) If emergency warning systems are provided, then they shall include both audible alarms and visual alarms complying with 4.28. Sleeping accommodations required to comply with 9.3 shall have an alarm system complying with 4.28. Emergency warning systems in medical care facilities may be modified to suit standard health care alarm design practice.

Visual Alarms (continued)

Requirement:

4.28.1 General. Alarm systems required to be accessible by 4.1 shall comply with 4.28. At a minimum, visual signal appliances shall be provided in buildings and facilities in each of the following areas: restrooms and any other general usage areas (e.g., meeting rooms), hallways, lobbies, and any other area for common use.

Drinking Fountains

Error/Omission:

All drinking fountains are mounted with the spout at 36" A.F.F.

Result:

People who have difficulty stooping or bending over are not able to get a drink from the accessible 36" high drinking fountain.

Requirement:

4.1.3(10)* Drinking Fountains:

(a) Where only one drinking fountain is provided on a floor there shall be a drinking fountain which is accessible to individuals who use wheelchairs in accordance with 4.15 and one accessible to those who have difficulty bending or stooping. (This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler; or by such other means as would achieve the required accessibility for each group on each floor.)

(b) Where more than one drinking fountain or water cooler is provided on a floor, 50% of those provided shall comply with 4.15 and shall be on an accessible route.

Restaurants

Error/Omission:

Food service queuing areas are too narrow and do not provide adequate clear width for turns.

Result:

People who use wheelchairs cannot get to the counter to purchase or pick up food. Sometimes they get into the queuing area and get trapped.

Requirement:

4.3.3 Width. The minimum clear width of an accessible route shall be 36 in (915 mm) except at doors (see 4.13.5 and 4.13.6). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Fig. 7(a) and (b).

Error/Omission:

Condiment or utensil items are placed above the reach range or are not located on an accessible route.

Result:

Wheelchair users cannot obtain condiments and other items because the items are out of reach or there is no way to get to the items.

Requirement:

5.6 Tableware and Condiment Areas. Self-service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall be installed to comply with 4.2 (see Fig. 54).

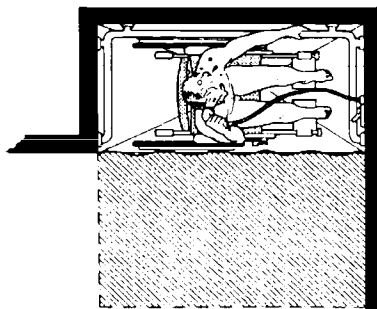
Transient Lodging

Error/Omission:

In hotels, motels, or other lodging facilities of 50 or more sleeping rooms, no rooms with roll-in showers are provided, or the roll-in showers that are provided lack a fold-down seat.

Result:

People who must use a roll-in shower or a shower with a fold-down seat cannot bathe. When a roll-in shower is provided without a folding seat, guests may resort to using guest room furniture in the shower.



Requirement:

9.1.2 Accessible Units, Sleeping Rooms, and Suites. Accessible sleeping rooms or suites that comply with the requirements of 9.2 (Requirements for Accessible Units, Sleeping Rooms, and Suites) shall be provided in conformance with the table below. In addition, in hotels, of 50 or more sleeping rooms or suites, additional accessible sleeping rooms or suites that include a roll-in shower shall also be provided in conformance with the table below. Such accommodations shall comply with the requirements of 9.2, 4.21, and Figure 57(a) or (b).

Error/Omission:

Wheelchair-accessible rooms are not equipped with visual alarms and notification devices.

Result:

People who are deaf or hard of hearing and who also need to use a guest room with accessible features have no accommodation.

Requirement:

9.2.2 (8) Sleeping room accommodations for persons with hearing impairments required by 9.1 and complying with 9.3 shall be provided in the accessible room or suite.

Error/Omission:

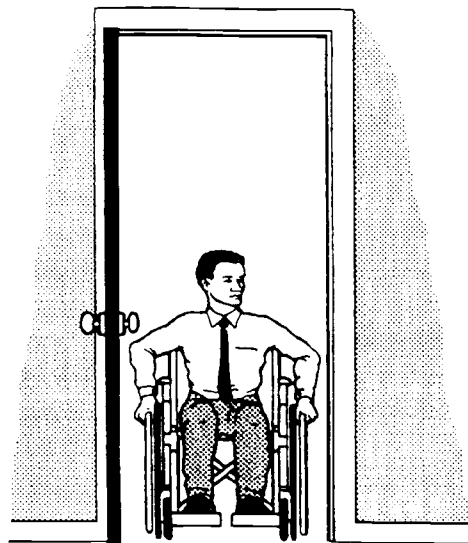
Doors into and within guest rooms that are not accessible guest rooms do not provide at least 32" clear opening width.

Result:

People who use a wheelchair, scooter, or walker are unable to enter standard guest rooms and are excluded from accommodations when accessible guestrooms are occupied.

Requirement:

9.4 Other Sleeping Rooms and Suites. Doors and doorways designed to allow passage into and within all sleeping units or other covered units shall comply with 4.13.5.





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